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ABSTRACT

In order to examine whether different results are obtained from two sociometric techniques for determining children's peer preferences in desegregated schools, two studies were conducted. The techniques compared were (1) the traditional peer nomination method, in which children list a few classmates whom they consider friends; and (2) the roster and rating method, in which each child rates all classmates on an interval scale. The first study involved meta analysis of existing data. Results of research using the two sociometric methods were compared and it was found that peer nomination studies tend to find more same-race preferences than roster and rating studies. The second study involved field research. Sixth graders at a newly desegregated school were asked to show their peer preferences on both types of measures. Results indicated that the peer nomination method results in larger differences in preferences for same-race peers over peers of a different race. These findings suggest that peer nomination techniques, which restrict the number of choices a child can make and thus encourage the naming of best friends, should be used to assess close friendships; roster and rating methods may be more appropriately used to assess more general intergroup acceptance. (Author/MJL)

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Peer Nomination versus Rating Scale Measurement of Children's Peer Preferences in Desegregated Schools

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Peer Nomination versus Rating Scale Measurement of Children's Peer Preferences in Desegregated Schools

One of the social goals of school desegregation is the elimination, or at least the reduction, of intergroup prejudice (e.g., Cook, 1979; St. John, 1975; Stephan, 1978). One good indicator of this outcome is the degree to which racial in-group and out-group members are equally preferred as partners for activities such as work or play. However, a large number of studies have found strong preferences to interact with in-group members among children in desegregated schools (see reviews by St. John, 1975; Schofield, 1978; Stephan, 1978), leading Stephan to conclude that "desegregation generally does not reduce the prejudice of whites toward blacks" and that it "leads to increases in black prejudice toward whites about as frequently as it leads to decreases" (1978:217).

A common feature of many of the studies leading to this conclusion is the use of the traditional sociometric peer nomination method to measure peer preferences: each child is asked to list a few (usually three to five) classmates who are friends or best friends. Such a procedure severely restricts the number of others a child can choose and results in the nomination of a few very close friends. If no out-group members are included among these choices, one might conclude that out-group members are not accepted. It is possible, however, that students have reasonably favorable attitudes toward the out-group members, but do not consider them to be close enough friends to be included in their limited number of choices.

A number of more recent studies of peer preferences have used a different methodology, the roster-and-rating method, in which each child

rates all of his or her classmates on an interval preference scale. As discussed below, these studies have found that similarity of race has a fairly weak effect on peer preferences. The roster-and-rating method also assesses a somewhat different aspect of peer preference than does the peer nomination technique. Peer nominations reveal friendships, whereas the roster-and-rating technique assesses interpersonal acceptance, a much less intimate form of relationship (Asher & Hymel, 1981; Asher & Renshaw, 1981). Since interracial acceptance rather than friendship is the goal of school desegregation as a social policy (Allport, 1954; Amir, 1976; E. Cohen, 1975), peer nominations may be inappropriate as evaluation criteria if their results differ substantially from those of a measure of social acceptance, such as the roster-and-rating method. Under such conditions, generalizations based on peer nomination data concerning the effectiveness of desegregation as a social policy, such as those of Stephan (1978) cited above, would have to be considered to be tentative rather than conclusive.

In order to examine the question of whether different results are obtained using the two sociometric techniques, this article will first briefly review the studies of children's peer preferences in desegregated schools which have used the the two methods. We will then report the results of two studies--a meta-analysis of previous research and a new field study--comparing the effects of the peer nomination and roster-and-rating methods of measuring peer preferences on the magnitude of assessed in-group preference.

Insert Table 1 About Here

Peer Nomination Studies

Studies of children's peer preferences in desgregated schools using the peer nomination technique are listed in Table 1. The studies included in this review and the following review of the roster-and-rating studies were drawn from those listed in St. John's (1975) exhaustive review of the literature. More recent studies were located through searches of Sociological Abstracts and Psychological Abstracts, and by examination of studies cited in papers obtained from this search. The results of the peer nomination studies have been reported using three basic formats: nonstatistical descriptions, descriptive statistics, and inferential statistics.

Descriptions. Fourteen studies reported their results descriptively, nine in the form of narratives and five in the form of sociographs. Of these 14 studies, all but three (Schmuck & Luszki, 1969; Stulac, 1979; Yarrow, Campbell, & Yarrow, 1958) reported finding same-race peer preferences. Although the results of the majority of these studies suggest a high level of same-race preference, they provide no estimate of the magnitude of that preference.

Descriptive statistics. Five studies reported descriptive statistics relating to peer preferences. Polgar (1977) reported that 24% of the free-play groups she observed were cross-race and concluded that this indicated same-race preferences. The other studies reported Criswell's (1943) group preference index: the ratio of the number of

in-group choices made to the number of out-group choices made, corrected for group size. This index can take on values from zero to infinity, with a value of 1 indicating equal preference for members of both groups and values greater than 1 indicating inceasing in-group preferences. The mean index value of the four studies using the index was 30.6, indicating a high degree of in-group preference. This index value can be interpreted as indicating that if the number of black and white students in the schools were equal, in-group members would be chosen 30.6 times as often as out-group members. Since no sampling distribution exists for the Criswell index, the probabilities of these values occurring by chance cannot be ascertained.

Inferential statistics. Eleven studies used inferential statistics to test the null hypothesis of equal preference for in-group and out-group members. Analysis of variance (Koslin, Koslin, Pargament, & Waxman, 1972) and a t-test (Mabe & Williams, 1975) were used to test for differences in the proprtion of black children nominated as friends by black and white peers in two studies, and the others used chi-squares to test for differences in the number of cross-race choices made versus the number expected by chance. For presentation in Table 1, these statistics were converted to the percentage of choice variance accounted for by similarity of race (cf. Glass, 1977); larger values indicate greater same-race preference. In all cases, the percentage of variance accounted for was significantly greater than zero, and the mean value was 19.0%. These results suggest that moderately strong same-race preferences are found among children in desegregated schools.

Insert Table 2 About Here

Roster-and-Rating

The seven studies of interracial peer preference which have used the roster-and-rating method are listed in Table 2. All seven studies used analysis of variance to analyze their data. The results have been converted to the percentage of variance accounted for by similarity of race to permit comparison with the peer nomination studies using inferential statistics. Three of the studies (Carter DeTine, Spero, & Benson, 1975; Singleton & Asher, 1977, 1979) failed to find significant differences in preferences based on similarity of race, and in only two cases (Lewis, 1971; Asher, Singleton & Taylor, 1982, 7th-grade sample) did it account for more than 2.5% of the variance. The mean percentage of preference variance accounted for by similarity of race was 7.7%, compared to 19.0% for the comparable peer nomination studies.

These marked differences in the amount of variance accounted for by similarity of race using the two types of sociometric measures described above raises the question of whether the exclusive, restricted choices used as data under the peer nomination method might exaggerate the assessed degree of same-race preference compared to the roster-and-rating method. Two studies were conducted to investigate this question. Study 1 was a meta-analytic comparison of the results of the roster-and-rating studies with those of the peer nomination studies which used inferential statistics. Study 2 was a field study in which children in a newly-opened desegregated school indicated their peer preferences

using both types of measures.

STUDY 1

Meta-analysis is a method of statistically combining the results of independent studies and using inferential statistics to aid in the evaluation of a body of research literature (Glass, McGaw, & Smith, 1981; Rosenthal, 1978). It is a quantitative evaluation of a set of related empirical studies which integrates the results of their statistical analyses, as opposed to the traditional literature review which uses qualitative techniques to integrate a body of literature. Meta-analysis provides overall effect size estimates for a set of studies based on a metric common to the studies being analyzed, and overall Z-scores for the hypotheses tested by the studies. In addition, studies can be grouped into categories based on common characteristics, and the mean effect sizes of the categories can be tested for differences (Glass et al., 1981). In the present case, mean effect sizes were computed for the peer nomination and roster-and-rating studies and their difference was tested for statistical significance. It was expected that the peer nomination method would yield larger effect sizes than the roster-and-rating method.

Method

The peer nomination studies included in the meta-analysis are listed in the third section of Table 1 and the roster-and-rating studies are listed in Table 2. Effect sizes were computed separately by grade level where possible, so that the 11 peer nomination studies provided 16 observations of the effect of racial similarity on peer preferences and included a total of 4460 subjects. The seven roster-and-rating studies

provided eight observations and included a total of 2159 subjects. Mean effect sizes (ES) and combined probability levels (Zma) were computed for the studies. Zma was calculated by finding the standard normal deviate (Z) associated with each effect size's test statistic and dividing the sum of the Z-scores by the square root of the number of studies involved (cf. Rosenthal, 1978). Exact Z-scores were calculated using the formulas provided by Rosenthal and Hall (1981).

Results

Both the peer nomination studies (ES = 19.0, Zma = 20.40, $p < .0001$) and the roster-and-rating studies (ES = 7.7, Zma = 8.42, $p < .0001$) found that similarity of race had a statistically significant effect on peer preferences. However, as hypothesized, the peer nomination ES was larger than the roster-and-rating ES, $t(22) = 1.65$, $p = .055$, suggesting that the method used to assess peer preferences affects the apparent magnitude of the effect.

Because effect sizes by grade level were available, the opportunity was taken to test Asher et al.'s (1982) suggestion that same-race preference increases with grade level. For those studies where results were collapsed across grade level (e.g., Criswell, 1939), the median grade level included in the study was used. The correlation between grade and effect size was .202, $p = .18$. Although not statistically significant, the magnitude of the correlation indicates that that further investigation of this relationship would be worthwhile, since the lack of exact grade levels for all studies may have attenuated the correlation.

Discussion

The results of the meta-analysis indicate that peer nomination studies tend to find more same-race preference than do roster-and-rating studies. One possible reason for this difference is the fact that the peer nomination method generally restricts the number of choices a child can make, thus encouraging the naming of best friends. Cross-racial best friendships are unlikely to be found given the residential segregation that often accompanies school desegregation. The roster-and-rating method, on the other hand, assesses intergroup acceptance without in practice limiting the respondant to best friends: black and white students can report liking each other without being best friends.

There are two plausible alternative explanations for the different results obtained with the two methods, however. First the nomination studies are generally older than the roster-and-rating studies, so the difference may reflect recently-developed more accepting racial attitudes. Secondly, many peer nomination studies were conducted in conjunction with school desegregation programs in which black students were transferred into formerly all-white schools. The black students were therefore newcomers to the established social structures of the schools, and newcomers are often poorly received in children's and adolescents' groups, even when race is not an issue (e.g., Feshbach, 1969; Feshbach & Sones, 1971; Ziller & Behringer, 1961). This newcomer effect is illustrated by Becker's (1967) study of a newly desegregated school which received new white students as well as new black students. Considering just the white students, newcomer status accounted for 10.2% of the peer preference variance, with strong in-

group preferences being found, especially among the established students. Most of the roster-and-rating studies, on the other hand, were conducted in schools that had been desegregated for some time, so that race was not confounded with newcomer status. Thus, in order to clarify the relationship between the type of measure employed and the magnitude of assessed in-group preferences, a second study was conducted in which the variables of time and newcomer status were controlled.

STUDY 2

Study 2 was conducted in a newly-opened desegregated middle school which drew pupils from nearly two dozen elementary schools, thereby essentially controlling the newcomer status of the black and white students. Students expressed preferences for their classmates using both the peer nomination and roster-and-rating techniques. Two hypotheses were tested. First, it was expected that similarity of race would account for more variance when the peer nomination method was used than when the roster-and-rating method was employed. Secondly, it was expected that the peer nomination method would yield a larger difference between the preference scores given to in-group and out-group members than would the roster-and-rating method. Such a finding would indicate that the in-group preference as assessed by the peer nomination method was stronger than the in-group preference as assessed by the roster-and-rating method. In addition to investigating the effects of the technique on the assessed magnitude of cross-race preferences, the study also assessed cross-sex preferences. A number of both the peer nomination studies (e.g., Becker, 1967; Criswell, 1939) and roster-and-rating studies (e.g., Singleton & Asher, 1977, 1979; Whitley &

Schofield, 1982) have found same-sex preferences to be stronger than same-race preferences.

Method

Subjects

Subjects were 29 black male, 35 black female, 30 white male, and 20 white female sixth-graders who were members of several classrooms randomly selected for study as part of a larger research project on school desegregation. The school in which the classes were located and the demographic characteristics of its students are described in Schofield (1982).

Procedure

The students completed four questionnaires at both the beginning and the end of the school year. On the two roster-and-rating questionnaires, they rated the degree to which they would like to have each of their classmates as a work or as a play partner. Each child's preference score for work or play for a race-sex group (e.g., black males) was his or her mean rating of all members of that group. On the other two questionnaires, the students nominated the three classmates they would most like to have as a work or as a play partner. Each child's score for a group was the number of persons from that group whom he or she named.[1] Students were told that their responses would be confidential and seats were arranged in the classes studied so that students could not see each others' responses. The order of the four questionnaires was counter- balanced at both administrations.

Results

Proportions of Variance

Students' responses to each of the questionnaires were analyzed using 2 (race of subject) x 2 (sex of subject) x 2 (similarity of rater's and ratee's race) x 2 (similarity of rater's and ratee's sex) x 2 (time) ANOVAs. The last three variables were treated as within-subjects factors. Percentages of variance accounted for were calculated using the formulas provided by Dodd and Schultz (1973).

Insert Table 3 About Here

Percentages of variance accounted for by similarity of race and sex using the two different sociometric techniques are shown in Table 3. Similarity of race accounted for 7.6% of the work variance and 9.6% of the play variance when nominations were used, and 0.9% of the work variance and 1.1% of the play variance when ratings were used. Similarity of sex accounted for 34.6% of the nomination work variance and 33.1% of the nomination play variance, and for 36.7% of the rating work variance and 40.7% of the rating play variance. Thus, the variance accounted for by race was roughly eight times greater for both work and play choices with the peer nomination technique than with the roster-and-rating technique, whereas the estimates of the variance accounted for by sex provided by the two methods were virtually identical.

Lacking a direct statistical test for differences in percentages of variance accounted for, another way to look at these results is to note that for similarity of race, the effect sizes in the roster-and-rating

data fall within the range categorized by J. Cohen (1977) as small, whereas those for nominations fall within the moderate range. Both effect sizes for similarity of sex fall well within the large range.

Differences in Preference Scores Given to In-Group and Out-Group Members

Data analysis. The hypothesis that the peer nomination method would yield a larger difference between the preference scores given to in-group and out-group members than would the roster-and-rating method was tested by converting the rating and nomination scores to Z-scores (ratings were on 5-point scales and nominations, effectively, on 4-point scales) and analyzing the scores with two (work and play) 2 (race of subject) x 2 (sex of subject) x 2 (method) x 2 (similarity of race) x 2 (similarity of sex) x 2 (time) ANOVAs. The last four variables were treated as within-subjects factors.

The predicted method effect would be indicated by interactions of method with similarity of race and sex, since such an interaction would suggest that one method resulted in a larger difference between the ratings of in-group and out-group members than did the other. The strength of the effect was measured by *a priori* contrasts of the form (A-B)-(C-D), where A was the in-group nomination score, B the out-group nomination score, C the in-group rating score, and D the out-group rating score. In order to avoid taking seriously effects which might be statistically significant but account for virtually no variance (cf. S. A. Cohen & Hyman, 1977), for an effect to be considered to be significant, it had both to reach conventional levels of statistical significance and to account for at least 1% of the preference variance (cf. J. Cohen, 1977). All *F*-tests had 1 and 110 degrees of freedom.

Initial analyses indicated that there were neither main effects for time nor interactions of time with method for either work preferences, largest $F = 1.01$, $p = .31$, or play preferences, largest $F = 2.22$, $p = .14$, so the results were collapsed across time for further analyses.

Insert Table 4 About Here

Similarity of race. Mean standardized preference scores for peers of the same and different race and sex assessed by nominations and ratings are shown in Table 4. As expected, there were main effects for similarity of race, with peers of the same race being preferred to peers of the other race for both work (same $M = .236$, different $M = -.312$), $F = 77.12$, $p < .0001$, and play (same $M = .262$, different $M = -.220$), $F = 83.38$, $p < .0001$. Also, as hypothesized, the similarity of race by method interaction was significant for work preferences, $F = 57.19$, $p < .0001$, with the nomination scores being 0.69 standard deviations larger than the rating scores, $t = 3.65$, $p < .0005$. For play preferences, the similarity of race by method interaction was again significant, $F = 40.62$, $p < .0001$, with the nomination scores being 0.64 standard deviations larger than the rating scores, $t = 3.11$, $p < .005$. Preferences for racial in-group members over out-group members thus appear to be stronger when measured by the traditional sociometric peer nomination method than when measured by the roster-and-rating method.

Similarity of sex. Mean standardized preference scores for peers of the same and different sex assessed by nominations and ratings are also shown in Table 4. As expected, there were main effects for

similarity of sex, with peers of the same sex being preferred to peers of the other sex for both work (same $\underline{M}$ = .752, different $\underline{M}$ = -.817), $\underline{F}$ = 1062.91, $\underline{p} < .0001$, and play (same $\underline{M}$ = .793, different $\underline{M}$ = -.859), $\underline{F}$ = 1134.17, $\underline{p} < .0001$. The similarity of sex by method interactions were not statistically significant for either the work questionnaires, $\underline{F}$ = 2.26, $\underline{p}$ = .14, or the play questionnaires, $\underline{F} < 1$. The sociometric method used thus appears to have little effect on the magnitude of assessed cross-sex peer preferences.

Insert Table 5 About Here

Interaction of similarity of race and sex. There were interactions of similarity of race and similarity of sex on both the work questionnaires, $\underline{F}$ = 72.63, $\underline{p} < .0001$, and the play questionnaires, $\underline{F}$ = 65.67, $\underline{p} < .0001$. The relevant mean standardized preference scores are shown in Table 5. Peers of the same sex and race were preferred to all others for both work and play, $\underline{p} < .01$ by Scheffe's test. There were also similarity of race by similarity of sex by method interactions for work preferences, $\underline{F}$ = 47.81, $\underline{p} < .0001$, and for play preferences, $\underline{F}$ = 39.32, $\underline{p} < .0001$. For both work and play preferences, similarity of race had a larger effect when assessed by nominations than when assessed by ratings for peers of the same sex, $\underline{p} < .01$ by Scheffe's test, but there was no difference for peers of the other sex.

Discussion

The results of this study indicate that the method used to assess peer preferences can have a significant effect of the magnitude of the

assessed preferences. When the traditional sociometric peer nomination method is used, differences in preferences for racial in-group members versus out-group members are larger than when the roster-and-rating method is used. This difference in the magnitude of the same-race preference is probably due to the type of information requested by the two methods. The peer nomination method generally has respondants name their best friends, whereas the roster-and-rating method measures acceptance or how well the respondant likes different members of race and sex groups. While cross-racial best friendships may be desirable, they go beyond the degree of interpersonal intimacy which desegregation as a social policy is designed to bring about (e.g., Allport, 1954; Amir, 1976; E. Cohen, 1975). As such, best friendships should not be a criterion for success in achieving the social goals of school desegregation.

The failure to find a method difference in the assessment of cross-sex preferences is probably due to a ceiling effect caused by the very strong homosociality found among sixth-graders (cf. Coleman, 1961; Waller, 1967). This homosociality is reflected in the much stronger effect that sex, as compared to race, had on preferences, and in the fact that method differences were found for same-sex, but not different-sex, peers. The latter received uniformly low preferences regardless of method. These results suggest that sex is a more salient characteristic in forming peer preferences among sixth-graders than is race.

Finally, it is interesting to note that time had no effect on peer preferences. The results of the roster-and-rating portion of the study suggest that the lack of change may have been due to relatively positive

initial attitudes of the students which left little room for improvement. To the extent that such attitudes become commonplace, school desegregation should not be expected to have major effects on interracial attitudes.

CONCLUSIONS

The results of these two studies suggest that the interpretation of research using different sociometric methods should be tempered by an awareness of the effects which the different measurement techniques can have on assessed scores. Thus Stephan's (1978) pessimistic conclusion quoted earlier and other reports of the "failure" of the social goals of school desegregation may be reflections of measurement artifacts rather than of the real state of intergroup relations. Since both the peer nomination and roster-and-rating methods have good reliability and validity (Asher & Hymel, 1981; Asher & Renshaw, 1981), future research on peer preferences should use a variety of methods to assess intergroup preferences, and should insure that the operational definitions of constructs accurately reflect the conceptual definitions of those constructs. Thus, for example, peer nominations should be used to assess close friendships, whereas roster-and-rating methods may be more appropriate to the assessment of more general intergroup acceptance.

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Footnote

[1] Analyses conducted on proportions of nominations adjusted for the size of the group in the class yielded substantially the same results as those reported here.

Table 1

Peer Nomination Studies

Study	Grade	N	Measure	Analysis	Results
Descriptions					
Bennett, 1979	7-8	1500	rate all classmates	sociograph	intra-racial choice
Clement & Harding, 1978	?[a]	?	name friends in class	description	intra-racial choice
Fagan, 1980	8	200	name 3 friends	description	intra-racial choice
Gerard et al., 1975	K-6	3848	choose 3 classmates	description	intra-racial choice
Kaplan & Matkin, 1967	2-8	302	choose 4 classmates	description	intra-racial choice
Kupferer, 1954	H.S.[b]	34	choose 3 classmates	sociograph	intra-racial choice
Marascuilo, 1972	H.S.	670	self-report of number of cross-race friends	description	intra-racial choice
Patchen, 1982	9-12	5479	name 5 best friends	description	intra-racial choice
St. John & Lewis, 1975	6	79	choose very best friends	sociograph	intra-racial choice
Schmuck & Luszki, 1969	?	126	name 4 best friends	description	cross-racial choice
Smith, 1969	?	5300	name 5 best friends	description	intra-racial choice
Stulac, 1979	K-6	389	choose 3 classmates	sociograph	cross-racial choice
Yarrow et al., 1958	3-10	132	rank camp cabinmates	description	cross-racial choice
Ziomek et al., 1980	K-6	?	choose 1 classmate	description	intra-racial choice

Table 1 Continued

Descriptive Statistics					
Gottlieb & TenHouten, 1965	H.S.	4265	name 3 best friends	Criswell Index	index = 54.5
Lundberg & Dickdon, 1952a	H.S.	1576	name 3 friends	Criswell Index	index = 36.0
Lundberg & Dickson, 1952b	H.S.	1360	name 3 friends	Criswell Index	index = 18.1
Polgar, 1977	?	?	observation of free play	% cross-race play groups	24%
St. John, 1964	11	?	name 3 friends	Criswell Index	index = 14.0
Inferential Statistics					
Bartel et al., 1973	K-4	160	choose 1 classmate	chi-square	p.v.[c] = 9.7%
Becker, 1967	2	140	name 4 best friends	chi-square	p.v. = 2.3%
	3	140	name 4 best friends	chi-square	p.v. = 1.8%
	4	140	name 4 best friends	chi-square	p.v. = 21.2%
	5	140	name 4 best friends	chi-square	p.v. = 12.2%
	6	140	name 4 best friends	chi-square	p.v. = 7.1%
Cooper et al., 1980	7	20	name friends	chi-square	p.v. = 63.8%
Criswell, 1939	K-8	2276	choose classmates	chi-square	p.v. = 18.9%
DeVries & Edwards, 1974	7	55	name friends	chi-square	p.v. = 13.8%
Koslin et al., 1972	?	255	name 3 friends	ANOVA	p.v. = 19.0%
Mabe & Williams, 1975	2	52	choose 3 classmates	*t*-test	p.v. = 35.0%

Table 1 Continued

Shaw, 1973	4	93	name best friend	chi-square	p.v. = 20.2%
	5	84	name best friend	chi-square	p.v. = 46.6%
	6	56	name best friend	chi-square	p.v. = 35.4%
Slavin, 1977	7	62	name best friends	chi-square	p.v. = 4.4%
Slavin, 1979	7-8	424	name best friends	chi-square	p.v. = 1.7%
Weigel et al., 1975	7,10	285	name up to 10 grade-mates	chi-square	p.v. = 6.9%

[a] ? = not specified

[b] H.S. = high school population

[c] p.v. = percentage of variance accounted for by similarity of race

Table 2

Roster-and-Rating Studies

Study	Grade	N	Results(%)[a]
Asher et al., 1982	3	191	1.6
	7	96	43.3
Carter et al., 1975	7,8	212	0.0
Lewis, 1971	6	909	13.2
Singleton & Asher, 1977	3	227	0.3
Singleton & Asher, 1979	3	205	0.0
Snyder, 1981	6	163	2.4
Whitley & Schofield, 1982	6	156	1.1

[a]Percentage of variance accounted for by similarity of race.

Table 3

Percentage of Peer Preference Variance Accounted for by Race and Sex as Assessed by Nominations and Ratings

	Similarity of Rater's and Ratee's	
	Race	Sex
Work Preferences		
Nominations	7.6	34.6
Ratings	0.9	36.7
Play Preferences		
Nominations	9.6	33.1
Ratings	1.1	40.7

Table 4

Mean Standardized Preference Scores for Peers of the Same and Different Race and Sex Assessed By Nominations and Ratings

	Similarity of Rater's and Ratee's			
	Race		Sex	
	Same	Different	Same	Different
Work Preferences				
Nominations	.42	-.46	.81	-.83
Ratings	.03	-.16	.69	-.82
Play Preferences				
Nominations	.47	-.44	.85	-.82
Ratings	.05	-.22	.74	-.90

Table 5

Mean Standardized Preference Scores for Peers of the Same and Different Race and Sex Assessed by Nominations and Ratings

			Race of Ratee	
			Same	Different
		Work Preferences		
Sex of Ratee	Same	Nominations	1.67	-.78
		Ratings	.87	.51
	Different	Nominations	-.78	-.88
		Ratings	-.82	-.83
		Play Preferences		
Sex of Ratee	Same	Nominations	1.71	-.02
		Ratings	.96	.51
	Different	Nominations	-.77	-.86
		Ratings	-.85	-.95